

## CLAIMS

1. A method of detecting an emitter signal using a scanning system, the method comprising acts of:
  - 5 a) receiving a scan strategy to detect at least one emitter;
  - b) determining a size of the scan strategy; and
  - c) determining a capacity of a receiver system used to implement the scan strategy.
2. The method of claim 1, further comprising an act of:
  - 10 d) determining if the size of the scan strategy is within the capacity of the receiver system.
3. The method of claim 2, further comprising an act of:
  - 15 e) reducing the size of the scan strategy, if the size of the scan strategy is not within the capacity of the receiver.
4. The method of claim 3, wherein the scan strategy includes a plurality of dwells and wherein the act b) further comprises acts of:
  - 20 b1) determining a calibration size for the plurality of dwells; and
  - b2) determining a total size for the plurality of dwells.
5. The method of claim 4, wherein the total size includes the calibration size.
6. The method of claim 4, wherein each of the plurality of dwells has an associated  
25 instantaneous frequency (IF) bandwidth and the calibration size is based on sizes of a calibration table associated with each of the plurality of dwells, the act b1) further comprising acts of:
  - 30 determining the calibration size for each respective unique IF bandwidth by summing the sizes of the calibration tables associated with the dwells that are associated with the respective unique IF bandwidth.
7. The method of claim 5, wherein the act c) further comprises an act of:

c1) expressing the capacity of the receiver system as a first limitation on the calibration size for each unique IF bandwidth and a second limitation on the total size for each unique IF bandwidth.

5     8.     The method of claim 7, wherein the act e) further comprises acts of:  
         e1) discarding dwells of the plurality of dwells that exceed the first limitation; and  
         e2) replacing the discarded dwells with new dwells, the new dwells having a  
narrower IF bandwidth than the discarded dwells.

10    9.     The method of claim 8, further comprising acts of:  
         e3) if the plurality of dwells associated with one of the unique IF bandwidths  
exceeds the second limitation, merging two dwells having a same hardware configuration.

10.    The method of claim 9, further comprising acts of:  
15       f) transferring the scan strategy to the receiver system, and  
         g) executing the scan strategy on the receiver system.

11.    A computer-readable medium, having encoded thereon computer instructions  
which when executed by a computer system cause the computer system to perform a  
20    method comprising acts of:  
         a) receiving a scan strategy to detect at least one emitter;  
         b) determining a size of the scan strategy; and  
         c) determining a capacity of a receiver system used to implement the scan strategy.

25    12.    The computer-readable medium of claim 11, wherein the method further comprises  
an act of:  
         d) determining if the size of the scan strategy is within the capacity of the receiver  
system.

30    13.    The computer-readable medium of claim 12, wherein the method further comprises  
an act of:

e) reducing the size of the scan strategy, if the size of the scan strategy is not within the capacity of the receiver.

14. The computer-readable medium of claim 13, wherein the scan strategy includes a plurality of dwells and wherein the act b) further comprises acts of:

- b1) determining a calibration size for the plurality of dwells; and
- b2) determining a total size for the plurality of dwells.

15. The computer-readable medium of claim 14, wherein the total size includes the calibration size.

16. The computer-readable medium of claim 14, wherein each of the plurality of dwells has an associated instantaneous frequency (IF) bandwidth and the calibration size is based on sizes of a calibration table associated with each of the plurality of dwells, and the act b1) further comprises acts of:

determining the calibration size for each respective unique IF bandwidth by summing the sizes of the calibration tables associated with the dwells that are associated with the respective unique IF bandwidth.

17. The computer-readable medium of claim 16, wherein the act c) further comprises an act of:

c1) expressing the capacity of the receiver system as a first limitation on the calibration size for each unique IF bandwidth and a second limitation on the total size for each unique IF bandwidth.

18. The computer-readable medium of claim 7, wherein the act e) further comprises acts of:

- e1) discarding dwells of the plurality of dwells that exceed the first limitation; and
- e2) replacing the discarded dwells with new dwells, the new dwells having a narrower IF bandwidth than the discarded dwells.

19. A system for detecting an emitter signal comprising:

- a) a scan strategy to detect at least one emitter;
- b) means for determining a size of the scan strategy; and
- c) means for determining a capacity of a receiver system used to implement the scan strategy.

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20. The system of claim 19, further comprising:

- d) means for determining if the size of the scan strategy is within the capacity of the receiver system; and

- e) means for reducing the size of the scan strategy, if the size of the scan strategy is

10 not within the capacity of the receiver.